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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,052	12/06/2001	Monica Bokstrom	B&LAB-009	4387
7590 07/27/2004				
Lerner David Littenberg Krumholz & Mentlik 600 South Avenue West Westfield, NJ 07090		EXAMINER ALVO, MARC S		
		ART UNIT 1731		PAPER NUMBER

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/009,052

Applicant(s)

BOKSTROM

Examiner

Steve Alvo

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 is/are allowed.
- 6) ☒ Claim(s) 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0 492 040 in view of WO 96/05365.

EP 0 492 040 teaches dewatering device (Figure 2, 15) for dewatering the pulp to a consistency of 25 to 40% (Figure 2, (15) and pulp line to shredder), shredding device including a closed pulp shredding vessel (17), transporting conduit and a reaction vessel (23') for bleaching the shredded pulp with ozone (19). EP 0 492 040 further teaches that leakage of ozone into the atmosphere can cause a safety problem and teaches sealing the reactor from the atmosphere (column 5, lines 40-48) and regulates the pressure to prevent leakage. WO 96/05365 teaches "gas-sealingly conveying" (page 2, lines 6-7) high consistency (page 2, lines 22-23) shredded pulp through a conveyor from the shredder having a pulp inlet and outlet (page 2, lines 7-12) to the reaction vessel. During operation the pulp is conveyed through conveyor 16', which carries screw 24 and shaft 22' is provided with breaker arms 40. The screw and breaker arms would keep the pulp passing through the conduit non-compressed as they break up the pulp (page 4, line 25-page 5, line 4). WO 96/05365 teaches that in gas phase bleaching of pulp, downstream of the conveyor would be a vessel having a gaseous reagent which may be toxic or otherwise objectionable and teaches that it is important that the gas does not leak through the conveyor into the atmosphere (page 3, lines 14-22). WO 96/05365 further teaches gas sealing the conduit by using a pressure sensor (36) and differential controller (38) to maintain an upstream pressure

greater than the downstream pressure to prevent leakage backwards through the conduit. It would have been obvious to the artisan to prevent the ozone gas of EP 0 492 040 from leaking backwards through the pulp in the conduit leading back to the shredder using the pressure-sensor and pressure-regulating device of WO 96/05365 as both WO 96/05365 and EP 0 492 040 teach the dangers of leaking ozone into the atmosphere or the breaker arms of EP 0 492 040 (Figures 6 and 7). Claim 19; see breaker arms (40) of WO 96/05365 or the breaker arms of EP 0 492 040 (Figures 6 and 7).

**Claim 22 is allowed over the art.**

The term "gas-tightly" in claim 22 is being interpreted as meaning that the connection between the outlet pipe to the reaction vessel is tight enough to prevent the passage of any gas, e.g. similar to air-tight.

Applicants' arguments are moot due to the new art rejection. The shredder of EP 0 492 040 does not shred the pulp in the presence of ozone.

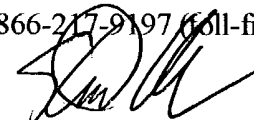
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steve Alvo  
Primary Examiner  
Art Unit 1731

msa